II. Claim Preliminary Amendments

Claims 1-23 (Cancelled, without prejudice or disclaimer)

24. (Currently Added) A method for removing suspended particles from a soluble protein solution comprising the step of filtering the soluble protein solution through highly purified diatomaceous earth, thereby providing a clarified soluble protein solution.

25. (Currently Added) The method of Claim 24, wherein the soluble protein solution is a secreted protein solution.

26. (Currently Added) The method of Claim 25, wherein the soluble protein solution is a lysate.

27. (Currently Added) The method of Claim 26, wherein the lysate is a bacterial lysate.

28. (Currently Added) The method of Claim 26, wherein the lysate is a bacterial lysate containing a heterologous protein that was obtained by expression in bacteria.

29. (Currently Added) The method of Claim 24, further comprising the step of stirring the soluble protein solution with a highly purified diatomaceous earth before filtering through a filter press.

30. (Currently Added) The method of Claim 24, wherein the yield of the soluble protein solution is between about 95% and about 100%.

31. (Currently Added) The method of Claim 24, wherein the highly purified diatomaceous earth is CELPURE.

32. (Currently Added) The method of Claim 27, wherein the bacteria is *E. coli*.

33. (Currently Added) The method of Claim 28, further comprising the step of blocking cysteine residues of the heterologous protein.

34. (Currently Added) The method of Claim 33, wherein the cysteine residues are blocked with an oxidizing agent.

35. (Currently Added) The method of Claim 34, wherein the oxidizing agent comprises sodium sulfite.

36. (Currently Added) The method of Claim 34, wherein the oxidizing agent comprises sodium tetrathionate.

37. (Currently Added) The method of Claim 34, wherein the oxidizing agent is a 2:1 ratio mixture of sodium sulfite and sodium tetrathionate.

38. (Currently Added) The method of Claim 34, wherein the oxidizing agent is added to the protein solution at a pH of between about 7.8 and about 8.2.

39. (Currently Added) The method of Claim 33, further comprising the step of deblocking the blocked cysteine residues.

40. (Currently Added) The method of Claim 39, wherein the blocked cysteine residues are deblocked with a reducing agent.

41. (Currently Added) The method of Claim 39, wherein the blocked cysteine residues are deblocked with dithiothreitol.

42. (Currently Added) The method of Claim 28, further comprising resolubilizing refractile bodies in the lysate.

43. (Currently Added) The method of Claim 28, in which the heterologous protein is SY161, wherein SY161 has an amino acid sequence as shown in SEQ ID NO 1.